



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,797	03/18/2004	Zhan He	Reveo-0136USAAON00	5603

7590 04/18/2006

REVEO, INC.  
85 Executive Boulevard  
Elmsford, NY 10523

EXAMINER
----------

VU, JIMMY T

ART UNIT	PAPER NUMBER
----------	--------------

2821

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/803,797

Applicant(s)

HE ET AL.

Examiner

Jimmy T. Vu

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2006.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 29-48 and 58 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 29,30 and 58 is/are rejected.  
7) ☒ Claim(s) 32 and 38-40 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claim 31 is objected to because of the following informalities:

Claim 31, line 6, delete "and the like".

Appropriate correction is required.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 29-31, 33-37 and 41-48 of the instant application are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 23-30 and 33-40 of U.S. Patent No. 6,710,541. Although the conflicting claims

Art Unit: 2821

are not **Double Patenting** identical, they are not patentably distinct from each other because:

Regarding claim 23 of the U.S. Patent 6,710,541 recites a polarized light source (see column 10, line 16) comprising all of elements of claim 31 dependent on claims 30/29 of the instant application. Therefore, claim 23 meets all of the limitation of claim 31.

Regarding claim 24 of the U.S. Patent 6,710,541 recites a polarized light source (see column 10, line 36) comprising all of elements of claim 30 dependent on claim 29 of the instant application. Therefore, claim 24 meets all of the limitation of claim 30.

Regarding claim 25 of the U.S. Patent 6,710,541 recites a polarized light source (see column 10, line 51) comprising all of elements of claim 33 dependent on claims 30/29 of the instant application. Therefore, claim 25 meets all of the limitation of claim 33.

Regarding claim 26 of the U.S. Patent 6,710,541 recites a polarized light source (see column 10, line 65) comprising all of elements of claim 34 dependent on claims 33/30/29 of the instant application. Therefore, claim 26 meets all of the limitation of claim 34.

Regarding claim 27 of the U.S. Patent 6,710,541 recites a polarized light source (see column 11, line 1) comprising all of elements of claim 35 dependent on claims 33/30/29 of the instant application. Therefore, claim 27 meets all of the limitation of claim 35.

Art Unit: 2821

Regarding claim 28 of the U.S. Patent 6,710,541 recites a polarized light source (see column 11, line 3) comprising all of elements of claim 36 dependent on claims 33/30/29 of the instant application. Therefore, claim 28 meets all of the limitation of claim 36.

Regarding claim 29 of the U.S. Patent 6,710,541 recites a polarized light source (see column 10, line 6) comprising all of elements of claim 37 dependent on claims 35/33/30/29 of the instant application. Therefore, claim 29 meets all of the limitation of claim 37.

Regarding claim 30 of the U.S. Patent 6,710,541 recites a polarized light source (see column 11, line 10) comprising all of elements of claim 33 dependent on claims 30/29 of the instant application. Therefore, claim 30 meets all of the limitation of claim 33.

Regarding claim 33 of the U.S. Patent 6,710,541 recites a polarized light source (see column 11, line 34) comprising all of elements of claim 41 dependent on claim 29 of the instant application. Therefore, claim 33 meets all of the limitation of claim 41.

Regarding claim 34 of the U.S. Patent 6,710,541 recites a polarized light source (see column 11, line 47) comprising all of elements of claim 42 dependent on claims 41/29 of the instant application. Therefore, claim 34 meets all of the limitation of claim 42.

Regarding claim 35 of the U.S. Patent 6,710,541 recites a polarized light source (see column 11, line 49) comprising all of elements of claim 43 dependent on claims

Art Unit: 2821

42/41/29 of the instant application. Therefore, claim 35 meets all of the limitation of claim 43.

Regarding claim 36 of the U.S. Patent 6,710,541 recites a polarized light source (see column 11, line 52) comprising all of elements of claim 44 dependent on claims 42/41/29 of the instant application. Therefore, claim 36 meets all of the limitation of claim 44.

Regarding claim 37 of the U.S. Patent 6,710,541 recites a polarized light source (see column 12, line 1) comprising all of elements of claim 45 dependent on claims 44/42/41/29 of the instant application. Therefore, claim 37 meets all of the limitation of claim 45.

Regarding claim 38 of the U.S. Patent 6,710,541 recites a polarized light source (see column 12, line 6) comprising all of elements of claim 46 dependent on claims 41/29 of the instant application. Therefore, claim 38 meets all of the limitation of claim 46.

Regarding claim 39 of the U.S. Patent 6,710,541 recites a polarized light source (see column 12, line 9) comprising all of elements of claim 47 dependent on claims 46/41/29 of the instant application. Therefore, claim 39 meets all of the limitation of claim 47.

Regarding claim 40 of the U.S. Patent 6,710,541 recites a polarized light source (see column 12, line 12) comprising all of elements of claim 48 dependent on claims 47/46/41/29 of the instant application. Therefore, claim 40 meets all of the limitation of claim 48.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 29, 30 and 58 are rejected under 35 U.S.C. 102(e) as being anticipated by Bao (U.S. Patent number 6,383,665 B1)

Regarding claim 29, Bao discloses a polarized light source (col. 3, lines 30-35) comprising a member of the group consisting of an organic electroluminescent device, said organic electroluminescent device including a mixture of a cholesteric liquid crystal material and an organic electroluminescent material (col. 3, lines 30-55), and an organic photoluminescent device (col. 3, lines 30-55), said photoluminescent device including a mixture of a cholesteric liquid crystal material (col. 3, lines 30-55) and an organic photoluminescent material (col. 3, lines 30-55).

Regarding claim 30, Bao discloses a polarized light source wherein said organic electroluminescent device inherently includes a cathode and an anode layer.

Regarding claim 58, Pope discloses a polarized light source comprising:  
a cholesteric liquid crystal polarizing means (see Abstract, col. 3, lines 30-55);  
and

means (see Abstract, col. 3, lines 30-55) for providing an unpolarized light source, said means for providing an unpolarized light source being a member of the group consisting of an organic electroluminescent device and an organic photoluminescent device (see Abstract, col. 3, lines 30-55).

### ***Allowable Subject Matter***

6. Claims 32, 38-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

None of the prior art teaches the polarized light source wherein said cholesteric liquid crystal material is further mixed with a conducting polymer, said conducting polymer being a member of the group comprising poly(para-phenylene vinylene); poly(N-vinyl-carbazole); 2-(4-biphenyl)-5-(4-tert-butylphenyl)-1,3,4-oxadiazole; 2,5-bis(5-tert-butyl-2-benzoxazolyl)thiophen; triphenyldiamine; tris-(8-hydroxyquinoline); mixtures thereof, and the like.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy T Vu whose telephone number is (571) 272-1832. The examiner can normally be reached on M - F: 9 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callahan Timothy can be reached on (571) 272-1740. The fax phone




Art Unit: 2821

numbers for the organization where this application or proceeding is assigned are (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2800.

Jimmy Vu

April 14, 2006



WILSON LEE  
PRIMARY EXAMINER